AMENDMENTS TO THE CLAIMS

1. (Original) Microfluidic arrangement which comprises

A) one or more microfluidic devices, each of which comprises a set (set I) of one or more essentially equal microchannel structures that are comprised within a common generally planar layer of the device (layer I),

each of said microchannel structures comprises an internal microconduit portion in which an active liquid flow is used; and

B) an instrument, which is intended for processing said one or more microfluidic devices and comprises a spinner motor and a rotary member;

characterized in that

I) said rotary member comprises a group of one or more seats for holding at least one of said one or more microfluidic devices, each of said seats is capable of

i) being positioned at the same radial distance as any of the other seats of the group,

ii) aligning layer I essentially radially at an angle α relative to the spin plane where $0° < \alpha \leq 90°$, with preference for α being essentially equal to 90°, and

iii) preferably positioning the corresponding positions in said microconduit portion of said microchannel structures in any of said one or more microfluidic devices at essentially the same radial distance,

II) said internal microconduit portion has an upstream part that can be positioned at a shorter radial distance than a downstream part when the corresponding microfluidic device is placed in any of said one or more seats.

2. (Original) The arrangement of claim 1, **characterized** in that the seats are adjustable in the radial and/or the axial direction.

3. (Original) The arrangement of claim 1, **characterized** in that the seats are at a fixed radial position.

4. (Original) The arrangement of any of claims 1-3, **characterized** in that each of said devices has two planar surfaces that are parallel to layer I and typically are rectangular with preference for each of said devices being disc-shaped.

5. (Currently amended) The arrangement of ~~any of claims 1-4,~~ claim 1, **characterized** in that the seats are capable of holding layer I of each of the microfluidic devices at different angles relative to the radius passing through the seat concerned, for instance at angles of 0°, 90° and/or 180°.

6. (Original) The arrangement of any of claims 1-5, **characterized** in that the microfluidic device is according to any of claims 7-19.

7. (Original) A microfluidic device comprising

i) two essentially planar and parallel opposite sides, and edge sides,

ii) a set of one, two, three or more essentially equal microchannel structures, each of which comprises a first inlet arrangement comprising an inlet port IP I_1,

characterized in that

a) each of the inlet ports is present in an edge side, and

b) the wettability of the inner walls of said first inlet arrangement permits penetration by self-suction (capillarity) of at least a predetermined first volume of an aqueous liquid which is contacted with said one or more inlet ports.

8. (Original) The microfluidic device of claim 7, **characterized** in that said first inlet arrangement is common for more than one of the microchannel structures, such as all microchannel structures of the set.

9. (Currently amended) The microfluidic device of ~~any of claims 7-8,~~ claim 7, **characterized** in that
   a) each of said microchannel structures comprises a second inlet arrangement comprising an additional inlet port IP I_2 which inlet arrangement and inlet port are connected to only one of the microchannel structures or is common for two or more microchannel structures,
   b) the wettability of the inner walls of the second inlet arrangement permits penetration by self-suction (capillarity) of at least a predetermined second volume of an aqueous liquid which is contacted with IP I_2.

10. (Currently amended) The microfluidic device of ~~any of claims 7-9,~~ claim 7, **characterized** in that either one or both of IP I_1 and IP I_2, if present, is/are part of a protrusion that is integral with or extends from the surface of the device.

11. (Currently amended) The microfluidic device of ~~any of claims 7-10,~~ claim 7, **characterized** in that
   a) at least one of said first and/or said second inlet arrangement, if present, comprises one volume-metering unit per microchannel structure associated with the arrangement, and
   b) said volume-metering unit has an outlet end associated with a valve function, preferably passive, which controls liquid transport through said outlet end into downstream parts of the microchannel structure that is associated with the volume-metering unit.

12. (Original) The microfluidic device of claim 11, **characterized** in that
   a) the inlet port of either one or both of said first and second inlet arrangements, if present, is fluidly connected to only one microchannel structure and
   b) the volume-metering unit preferably has an overflow channel for defining the volume to be metered in the unit.

13. (Original) The microfluidic device of claim 11, **characterized** in that the inlet port of either one or both of said first and second inlet arrangements if present, is fluidly connected to two or more of the microchannel structures via a distribution manifold containing one volume-metering unit per microchannel structure that is in fluid communication with the inlet port.

14. (Original) The microfluidic device of claim 13, **characterized** in that said distribution manifold comprises an excess microconduit that is common for all the volume-metering units of the manifold.

15. (Currently amended) The microfluidic device of ~~any of claims 9-14,~~ claim 9, **characterized** in that said wettability/hydrophilicity is present from IP I_1 or IP I_2, if present, to said valve function in each volume-metering unit connected to the inlet port concerned, thereby permitting filling by capillarity said inlet part to said valve function with said aqueous liquid.

16. (Currently amended) The microfluidic device of ~~any of claims 11-15,~~ claim 11, **characterized** in that
    a) each of the volume-metering units is capable of metering a liquid volume in the nanolitre range, e.g. ≤ 5000 nl such as ≤ 1000 nl or ≤ 500 nl or ≤ 100 nl, and
    b) each of said predetermined first and second (if present) volume is essentially equal to the sum of the volumes of liquids to be metered in the volume-metering units associated with the inlet arrangement/inlet port concerned.

17. (Currently amended) The microfluidic device of ~~any of claims 7-16,~~ claim 7, **characterized** in that the inlet port(s) (IP I_1) of the first inlet arrangement(s) is(are) present on one side, and the inlet port(s) (IP I_2) of the second inlet arrangemnt(s), if present, is(are) present on a different side, preferably at least one of the IP I_1s and IP I_2s is present on an edge side or on different edge sides.

18. The microfluidic device of ~~any of claims 7-17,~~ claim 7, **characterized** in that it is manufactured from at least two essentially planar substrates, one, two or more of which define the individual microchannel structures.

19. (Currently amended) The microfluidic device of ~~any of claims 7-18,~~ claim 7, **characterized** in that

(i) each of said microchannel structures extends in a layer of the device which layer is essentially parallel with said two opposite sides,

(ii) each of said microchannel structures comprises downstream one to said inlet arrangements an internal microconduit portion in which active fluid flow can be used for the transportation of liquid, reagents, analytes and the like, and preferably corresponding parts of the microconduit portion of each of said microchannel structures are at essentially the same distance from said first edge side.